

The amino-Acid sequences were LSA3-NRII Ac-  
LEESQVNDDIFNSLVKSQQEQQHNVK(Pam)NH2 (SEQ ID NO:2) and LSA1-J Ac-  
ERRAKEKLQEQQSDLEQRKADTKKK(Pam)NH2 (SEQ ID NO:3) in which the lipid-tail  
was covalently linked to the side chain of a C-terminal lysylamide residue. These lipid-tailed  
polypeptides were as previously described (Fidock et coll., 1994; BenMohamed et coll. 1997;  
Perlaza et coll., 1998). Most polypeptides and lipopeptides were >90% pure, as determined  
by HPLC.--

Please replace the paragraph beginning on page 12, line 28, with the following text:

--Individual blood samples were obtained *via* the retro-orbital plexus by 9 to 15 days  
post immunization (dpi) and sera were stored at -70°C until assayed for IgG, IgA and IgM  
polypeptide- and parasite- specific Abs. The presence of anti-peptide antibodies in sera was  
determined using Enzyme-linked immunosorbent assay (ELISA) as reported previously  
(BenMohamed et coll., 1997). ELISA plates (Nunc, Roskilde, Denmark) were coated  
overnight at 4°C with 0.1 ml of LSA3-NRII (SEQ ID NO:2) or LSA1-J (SEQ ID NO:3)  
polypeptide solution at 3 µg/ml in PBS buffer pH 7.4 containing 3% BSA. The LSA1-J  
(SEQ ID NO:3) polypeptide was used as the irrelevant control of LSA3-NRII (SEQ ID  
NO:2) and *vice versa*. The plates were washed twice in PBS with 0.01% Tween-20 (PBS-T),  
blocked for 1 hr in PBS-T supplemented with 1% BSA prior to the addition of 0.1 ml of  
1/100 dilution of mouse sera. The plates were then incubated at 37°C for one hour. After  
washing, the bound IgG were detected using peroxidase-conjugated goat anti-mouse IgG  
(Biosys, Compiégne, France) added at a 1/2000 dilution. Following incubation at 37°C for 1  
hour and a final wash, 50 µl of 0.30 % H<sub>2</sub>O<sub>2</sub> containing orthophenylenediamine  
dihydrochloride (OPD, Sigma, St. Louis), dissolved in 0.1 M citrate buffer (pH 5.0) were  
added to each well at room temperature. The OD450 nm was measured using a multichannel

spectrophotometer (Titertek Multiskan MCC. 340). Individual sera from all groups were diluted 1/100 and analyzed separately. Preimmune sera were used as negative controls and the results were expressed either as optical density (OD) at 450nm or as ELISA-RATIO calculated as follows: OD450 nm postimmune sera divided by OD450 nm preimmune sera. For polypeptide-specific ELISAs, sample dilution were considered positive if the OD450 nm recorded for that dilution was at least twofold higher than the OD450 nm recorded for a naive sample at the same dilution (Fidock et coll., 1994 ; Bottius et coll., 1996). Isotype analysis of mouse was carried out using class specific alkaline phosphatase-conjugated Goat anti-Mouse IgA, IgM, IgG1, IgG2a, IgG2b or IgG3 HRP-Labeled (Southern Biotechnology Associates, Birmingham, USA) added at a 1/2000 dilution in PBS-T, as previously described (BenMohamed et coll., 1997).--

Please replace the paragraph beginning on page 14, line 2, with the following text:

--For proliferation assays, spleen and inguinal lymph nodes were obtained from mice (3 to 6 per group) on 14 dpi using sterile forceps and placed into ice-cold Hank's balanced salt solution (HBSS). Single-cell suspensions were prepared by crushing the tissues between the frosted ends of two microscope slides. Red blood cells were removed by treatment with ammonium chloride on ice for 10 min. The single-cell suspensions were washed twice in RPMI-1640 (Gibco, Courbevoie, France) and were adjusted to  $4 \times 10^6$  cells/ml in RPMI-1640 media supplemented with 1.5% heat-inactivated fetal calf serum (FCS), 1% penicillin-streptomycin, 1% glutamine,  $5.10^{-5}$  M 2- $\beta$ -mercaptoethanol (Gibco), and 1% *N*-n-hydroxyethylpiperazine-*N'*-2 ethanesulphonic acid (HEPES), pH 7.4 , and used as previously described (BenMohamed et coll., 1997). Equal volumes of cells and complete medium or complete medium with LSA3-NRII (SEQ ID NO:2) or LSA1-J (SEQ ID NO:3) polypeptides were mixed to give a final concentration of  $2 \times 10^6$  cells/ml in medium alone or in medium